CLAIMS

1. A method of identification of a fingermark, comprising obtaining for a fingermark a fingermark image; storing reference fingermarks in a databank; comparing the obtained fingermark image with the reference fingermarks for identification; before the identification determining for each reference fingermark in comparison with the obtained fingermark image a similarity degree; sorting the reference fingermarks in the databank in accordance with the similarity degree; and performing the identification of the fingermark beginning with the reference fingermark which leads to a greatest similarity degree.

2. A method as defined in claim 1; and further comprising performing the identification in accordance with a details comparison.

3. A method as defined in claim 1; and further comprising performing the identification in accordance with a correlation of the fingermark with the corresponding reference fingermark.

4. A method as defined in claim 1; and further comprising determining the corresponding similarity degree by a comparison of properties of a corresponding area around a reference point of the fingermark with each property of the corresponding area of the reference fingermark.

5. A method as defined in claim 4; and further comprising using core and delta points as reference points.

6. A method as defined in claim 5; and further comprising placing square areas around the reference point of the fingermark; multiplying the area with window function; transforming the area by means of a first integral transform in a space frequency region; determining features in the areas of the reference point; evaluating for the features the space frequencies in accordance with amount and direction; and determining by the features of the fingermark and the reference fingermark correspondingly the similarity degree for the corresponding reference fingermark.

7. A method as defined in claim 6; and further comprising laying the square areas in different sizes.

8. A method as defined in claim 6; and further comprising breaking a power density spectrum of the areas of the reference points in sectors and rings; summing for the sectors and the ring the powers of the corresponding containing space frequencies so that for the sectors a degree for the orientation is provided and for the rings a degree for the amount;

forming thereby a ring vector and a sector vector; forming the ring vector and the sector vector as a feature vector; and comparing with a feature vector of the reference finger marks to determine the similarity degree.

10. A method as defined in claim 9; and further comprising joining the comparison of the ring vector and the sector vectors before and after a second integral transform to the similarity degree for the corresponding reference fingermark.

11. A method as defined in claim 10; and further comprising performing the comparison by a method selected from the group consisting of a difference square method and a correlation method.

12. A method as defined in claim 1; and further comprising selecting regions on the fingermark so that the regions have only papillar lines.

13. A device for identification of a fingermark, comprising a processor; a databank; a work storage; an indicator and a fingermark sensor for determination of a fingermark image, said processor being formed so that said processor compares a fingermark image with reference marks stored in said databank to determine a similarity degree for each reference fingermark, said processor sorting the reference fingermarks in said databank in accordance with the similarity degree, said processor performing identification of the fingermark starting with the reference fingermark with a greatest similarity degree, said processor exhibiting a result of the identification with said indicator.